Denali Fuel Project Activity Report October 1, 2018 – December 31, 2018

Rural Utility Business Advisor staff within the Department of Commerce, Community and Economic Development completed the second of eight communities identified in the Bulk Fuel Administrative Capacity Building Grant Amendment #1496-03.

Nulato

Fairbanks DCRA staff traveled to the City of Nulato on October 15, 2018 to conduct a bulk fuel Best Practices assessment. Staff reviewed the technical, managerial and financial administrative components of the Best Practices criteria for fuel facilities at the Nulato Fuel Depot.

The Nulato City Mayor, Administrator and bookkeeper, participated in the assessment process. The city does not have a certified operator but is looking for a class the operator can attend. The fuel depot operator has been employed at the facility for more than 10 years. The city does not have a preventative maintenance plan and it is unknown if they are complying with all state and federal fuel operations and regulations.

The City of Nulato operates the community's only gasoline and diesel retail dispensing facility. The tank farm is located in Old Town and consists of 6 single wall, horizontal, welded steel, ASTs within a fenced facility with locked gates. The tanks are within four separate containment areas with 2-foot high, earthen dikes with partially exposed liners. The liners are in poor condition and are not liquid tight. Tanks 1-3 share a common diked area and are supported by steel skids on concrete pads. Tanks 4-6 have steel skids either directly on grade or on heavy wooden timbers and are within individual diked areas. Tanks 1-3 have top mounted flanged fill connections and bottom mounted flanged fuel withdrawal connections. A 4-inch welded steel fill manifold with flanged steel valves at the tanks connects these tanks to an 800-foot long, mostly above grade 4-inch welded steel barge fill pipeline and barge header near the Yukon River. A 2-inch welded steel withdrawal manifold joins tanks 1 and 2 and feeds the gasoline retail dispenser through a buried 2-inch welded pipe. The gasoline manifold has threaded bronze valves and no flexes. Tank 3 feeds the diesel dispenser through a similar pipeline. A 2-inch rubber hose with a pump, meter and dispensing nozzle tees off the diesel manifold and is used as a dispenser for heavy equipment fueling and bulk fuel transfers. Tanks 4-6 have no piping and are filled/emptied on an as needed basis with a portable transfer pump. Fuel to fill the tank farm is delivered via a single Yukon River barge header and an 800 LF, mostly above grade, welded steel fill pipeline. The system is equipped with flanged steel gate and check valves and a steel drip container

The City also owns the tank farm that feeds the Water Treatment Plant (WTP)/Washeteria in New Town. It includes two single wall ASTs located adjacent to the WTP/Washeteria. The facility provides diesel for space and water heating. The tanks are supported by a heavy timber grid within a shallow earthen dike with an exposed liner. The tank farm includes 6' high chain link perimeter fence with locked gate. The liner is weathered, covered with tall grass and has insufficient capacity. Tanks are filled via truck through top threaded penetrations and have bottom mounted, threaded withdrawal connections equipped with 1.5 inch threaded brass gate valves. Both tanks are connected by a 1.5 inch threaded steel withdrawal

manifold with rubber flexes at the tanks. No pressure relief or emergency venting appurtenances were observed. A day tank pump draws fuel from the tank farm for use in the WTP boiler system via a buried 1.5 inch diameter threaded steel pipeline. Fuel to fill the tank farm is delivered by truck from tank farm 3 using the City fuel truck.

The AVEC tank farm consists of 14 single wall, horizontal, skid mounted, AST's for diesel storage. The tank skids are directly on the ground. The tanks are contained within an 18-inch high, unlined, earthen dike. The tanks are not equipped with emergency vents or manways. The facility is unfenced. All tanks have bottom mounted, threaded, combination fill/withdrawal connections equipped with threaded 3-inch bronze gate valves. Tanks are connected by a 3ft welded steel fill/withdrawal manifold with flanged steel flexes at the tanks as well as a flanged steel PRV that discharges into the top of Tank 14. A day tank pump inside the power plant draws fuel from the tank farm via a 2-inch below grade welded steel pipe equipped with a solenoid valve. Fuel to fill the tank farm is delivered via a barge header on the Yukon River and approximately 800 LF of 3ft diameter, welded steel, above grade pipeline. The header includes flanged steel gate and check valves, and a steel drip container. DCRA staff did not include the AVEC tank farm in its evaluation.

The city administrator completed the Personnel Management course, and Andrean Madros, successfully completed both the Personnel Management and the Clerk's Management from the Rural Utility Business Advisor (RUBA) program within the past year.

1 Aerial View of Nulato new town

The City of Nulato holds regular meetings and receives regular reports on the fuel depot. The city has a realistic budget which includes an enterprise fund for the fuel depot. They do not have an Repair and Replacement account but appear to be collecting sufficient revenue to cover operating expenses. Their Workers Compensation insurance is in place and current and the city is able to purchase the fuel during the year without the need for a loan.

Current gasoline price is $5.40/gal and heating fuel is $4.80/gallon. The city is considering buying propane in bulk and reselling it in the next few years.

Score 56

Tanks in New Town for WTP & Washeteria